

Listing of Claims:

1. (original) A semiconductor device comprising:
a substrate having conductive interconnections;
two or more vertically stacked chips on said substrate, each supporting chip having metal standoffs thereon to separate it from the next successive chip; and
a plurality of bond wires connecting at least one chip to said substrate.
2. (original) A semiconductor device as in claim 1, wherein said metal standoffs comprise aluminum islands.
3. (original) A semiconductor device as in claim 1, wherein the thickness of said metal standoffs is 5 to 20 kA.
4. (original) The semiconductor device of claim 1 wherein said standoffs are patterned over the chip passivation layer.
- 5- The semiconductor device of claim 1 wherein said metal standoffs are thermally conductive.
6. (original) The semiconductor device of claim 1 wherein said metal standoffs are positioned within the area surrounded by bond pads.
7. (original) The semiconductor device of claim 1 wherein a polymeric adhesive secures the first chip to said substrate.
8. (original) The semiconductor device of claim 1 wherein bond wires connect more than one chip to said substrate.
9. (original) The semiconductor device of claim 1 wherein said substrate is a BGA package substrate.
10. (original) The device of claim 1 wherein said metal standoffs have a uniform height.
11. (original) The device of claim 1 wherein said supporting chips include copper bond pads having aluminum caps.